NAVY CIVIL Engineer
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Working on BRAC

Seabee divers use a oxy-thermic torch to cut a pipe. For more about the divers and underwater construction teams, see the story on page 16.

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Speaking from Topside

As I wind up my three years as Chief, I thank every one of you for all you have done. I don't believe the Corps and our Navy have ever had to endure any rougher period, other than during wartime, than we have been through the last few years. A 40 percent budget cut has dictated a different way of surviving. Change has been and remains the rule: frequent reorganization, downsizing, attacks against the way we do business, a change in Administration, base closures, environmental cleanup, expanded roles for our public works centers, attacks against our Seabees (is nothing sacred?), and on and on and on. Have the good people in our Naval Facilities Engineering Command and Seabee families viewed these times as gloom and doom? Not on your life—simply more challenges for the finest team in government! Each day I am amazed at how you respond and come up with innovative solutions for the toughest, seemingly insolvable problems.

It is not possible for me to get around the whole NAVFAC/CEC/Seabee territory to personally see what everyone is doing. Yet it is obvious that, on a daily basis, all 22,000-plus civilians in our engineering field divisions, engineering field activities, public works centers, staffs, public works departments and contracts offices; our 2,200 superb active and reserve officers; and our 22,000 active and reserve Seabees—who are indeed one family—are all performing in an exceptional manner. Your accomplishments defy reason. We experienced a 25 percent increase in business in FY 94 alone, yet with 20 percent fewer people you accomplished a 100 percent execution rate in BRAC and environmental cleanup and more than 70 percent execution in '94 MILCON.

Thanks to Admiral Mike Boorda and many others, we have seen a tremendous emphasis on quality-of-life issues—family housing, bachelor quarters, child care and other people programs. Our people have worked for years planning for these programs, but the funds had always been cut for these programs first. This has all changed—we are now seeing support at all levels.

It would take a book to thank each of you and properly recognize what each civilian, reserve, and active member of our family has done. I do want to give special recognition to Rear Admiral Pat Drennon, who has just retired. What he has accomplished for our Corps and our Navy during his career, particularly during the last five years as N44, can't be over emphasized. He has been our most important member in our most important job—no one could have done it better.

RADM Jack E. Buffington, CEC, USN

Do we still have tough times ahead? You bet we do, maybe even tougher than what we have been through. But we will continue to rise to the occasion because we have the best Navy in the world, and because we have the best people—both military and civilian, reserve and active. I salute each of you and thank you again for all you have done and will continue to do. It has been an honor to serve with you.

Jack Buffington

JACK E. BUFFINGTON
Rear Admiral, CEC, USN
Commander,
Naval Facilities Engineering Command
and
Chief of Civil Engineers

'You must be working on BRAC'

Lessons learned from the San Francisco Bay Area

By Dean R. Wolf, R.A.
William E. Oswood

"The information is right here somewhere on my desk," I told the caller. He said, *"You must be working on BRAC."* I was surprised that he guessed correctly. He explained that everyone he encounters who is involved with BRAC (Base Realignment and Closure) has a messy desk, himself included.

The cluttered desk provides an analogy for my and my co-author's experiences following the third round BRAC announcement in March 1993. Despite months of responding to seemingly endless BRAC data calls, few of us at the Navy Public Works Center San Francisco Bay were well prepared for the intense activity in compressed time frames that followed the announcement.

Context

In March 1993, the Secretary of Defense nominated for closure most of the San Francisco Bay Area naval complex. The Defense Base Closure and Realignment Commission voted to close the Naval Shipyard Mare Island, Naval Air Station Alameda, Naval Station Treasure Island, Naval Hospital Oakland, Naval Aviation Depot Alameda, and our command, the Navy Public Works Center San Francisco Bay (PWCSFB). PWCSFB is scheduled to close in September 1998.

PWCSFB found itself with multiple roles in implementing the recommendations of the commission. These roles included:

- Planning staff for the commander, Naval Base San Francisco
- Owner of utility systems, houses and other facilities at each of the closing bases
- Owner of a closing base, the geographically separate Department of Defense Housing Facility in Novato, Calif.
- Service provider to bases that are not closing
- Planners for the proposed $350 million BRAC expansion at the Naval Air Station Lemoore, Calif.

Simply stated

The primary lesson learned from the 1993 San Francisco Bay Area BRAC experience is the enormous value of organizing and adequately staffing a base closure planning office.

Other important lessons include:

- *Skilled management* is essential to control time and resources in the months following the BRAC announcement.
- *Well-written planning documents* appreciate in importance as the closure progresses.
- *Interrelating data records* save time in the later stages of the closure process.
- *Military construction (MILCON) documentation* is more difficult than normal.
- *Budget support* is a critical initial function of the base closure plan.
- *Bases affected by BRAC face similar issues*, whether closing or gaining bases.

Benefits of BRAC plan

For closing bases, the benefit of a good base closure plan lies in the tools and resources it provides to effectively manage the drawdown.

For gaining bases, the benefit of a good BRAC plan lies in preserving opportunities for additional growth (which can readily accommodate new or expanded missions) after the BRAC

Dean Wolf is a community planner in the Base Closure Office of the Navy Public Works Center San Francisco Bay in Oakland, Calif. William Oswood is the director of the Business Strategies Department at PWCSFB.

facilities are constructed.

Organization and staffing

San Francisco Bay Area bases originally took one of two approaches to BRAC planning. Some commands set up base closure offices with full-time staff. Others assigned base closure planning responsibilities as collateral duties.

In retrospect, the bases with full-time staff got a fast start and developed comprehensive planning data. These closure teams found gaps in the local BRAC scenarios and resolved questions that might not have otherwise been uncovered. Whether a consequence of the complexity of the base closure or the availability of skilled personnel, the Defense Business Operating Fund (DBOF) organizations were the first ones to dedicate full-time staff to base closure planning.

It turned out that BRAC management is not well served as a collateral duty task. All closing bases now have full-time staff in their closure offices. The staff of a sample BRAC office might include some or all of these persons:

- Program analyst
- Workload analyst
- Budget/financial analyst
- Facilities planner
- Personnel analyst
- Plant/property account specialist
- Environmental advisor
- Utilities systems planner
- Housing planner
- Legal advisor
- Mapping specialist
- Computer programmer
- Presentation coordinator
- Editor

Time management

For senior managers, the March BRAC announcement triggered an avalanche of time demands. Higher commands wanted lots of information immediately. The task of providing this information fell on key in-house personnel who were not easily diverted from their usual work responsibilities.

Closure planning required extensive new information as well as updating many aspects of existing internal mission planning. At first, BRAC was a moving target. The milestones frequently changed as schedules and relationships were refined.

Time demands also appeared from outside the chain of command. Base commanders were called upon to provide education and information to the media and nearby communities.

The Department of Defense Office of Economic Adjustment (OEA) provides funds to communities impacted by base closures. OEA representatives relied on base staff to become familiar with the installation and the nearby communities.

"...BRAC management is not well served as a collateral duty task."

Well-written plan

A major benefit of writing a base closure plan is in the continuity it provides to the local base closure effort. At the time of this publication, all senior officers who participated in developing the 1993 San Francisco Bay Area closure plan have either rotated into new positions or have retired. Many of the civilians are also in new positions. The continuity of the Bay Area base closure effort relies on how well new Navy managers implement their predecessors' ideas.

Extra efforts in organizing and editing the closure planning report pay off. The concepts of a *concise and well-written plan* stand a good chance of being assimilated throughout the chain of command.

PWCSFB received appreciative comments from the Washington, D.C., level about the clarity of the San Francisco Regional BRAC Coordination

Who wants what

Type of Information	Navy	DoD Office of Economic Adjustment	Community
Cost of closure	X		
Coordination & sequence of proposed move	X		X
Military readiness during move	X		
Base profile		X	X
Reuse potential of land & facilities	X	X	X
Closure schedule	X	X	X
Process for transfer of assets	X		X
Impact funds required		X	X
How to obtain impact funds			X
Copies of presentations		X	X
Environmental concern/constraint areas	X		X
Utility data	X		X
Historical structures, areas, or settings	X		X

Plan. We believe that the extra effort we put into a well-written plan sharpened our thinking and helped gain support for our drawdown efforts and budget.

Data management

Starting with the data calls, various degrees of expediency are built into the BRAC resource data. No one responding to data calls has the time to rebuild data bases, or restructure the existing records.

A controlled and simple data management system saves time and becomes ever more attractive as the base closure progresses. Data upkeep can be a management nightmare if input material is not integrated or is poorly set up. Consistency of terminology between data bases (data dictionary) has been a problem that limits the usefulness of the extensive data developed for BRAC.

Our experience shows that an interrelated system of command-wide relational data bases integrated with spreadsheets, presentation, and project management software would help simplify BRAC management. PWCSFB is now folding a variety of data sources into a similar central BRAC information system. Ideally, statistical data should be supplemented by electronic drawing and mapping programs. PWCSFB is identifying personnel and property on building plans, which will help track their location through the drawdown and closure period.

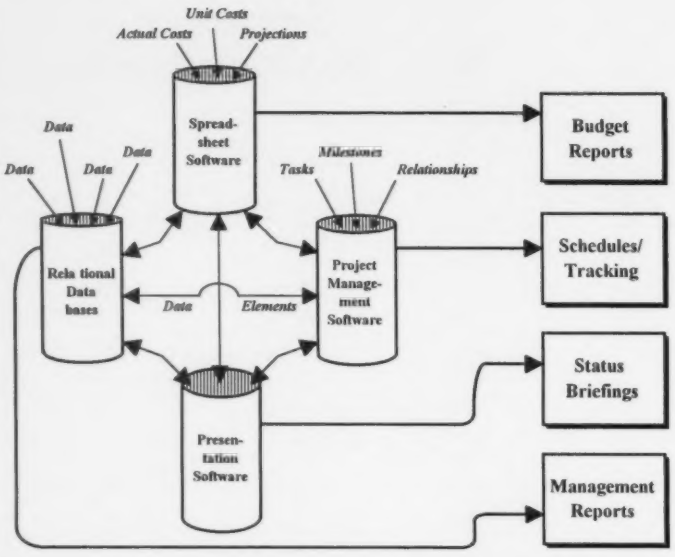
MILCON documentation

In BRAC 93, the MILCON data forms (DD1391s) were the last planning elements to be completed. Preparation times were short, and the BRAC MILCON documentation process contained extra steps.

Through the initial budget submission period, closing commands were responsible for preparing the MILCON documentation. This work, however, relied heavily on information available only from the receiving bases. And although the receiving command later assumed responsibility for all MILCON programming, the original project estimates were already in the system.

Segregating the BRAC from non-

The BRAC Management System



BRAC impact proved tricky, particularly when the receiving activity already had a similar project, such as an unfunded child care center. In contrast to the quickly made initial decisions, the auditor's later reviews were often painstakingly detailed. PWCSFB developed existing as well as proposed base loadings at the gaining activity to help clarify the BRAC-only impacts. Later in the process, PWCSFB prepared annual base loadings during the multi-year move-in period to justify the timing and size of facility projects.

Once the BRAC-only scope was identified, each project was again screened to assure that the new facility would be no larger than the facility being replaced (regardless of condition) at the losing activity.

The Naval Facilities Engineering Command required full MILCON documentation regardless of the number of BRAC projects at a base. In response, PWCSFB developed automated forms on spreadsheet software to expedite the documentation workload. Automated DD1391 forms, back-up estimates, and basic facility requirements worksheets helped improve the productivity of our engineering and planning staff. Using these systems, PWCSFB and the Engineering Field Activity West identified sites and prepared MILCON documentation for more than 50 BRAC projects at a single gaining base.

Budget support

Is budget support the primary or secondary function of a base closure plan? Arguments are valid for both positions. However, if the closure budget projection is inadequately supported, another round of closure plan revisions is likely. As with MILCON documentation, we found that budget projections required more thorough back-up than under normal conditions. The finality of closure leaves little room to make up for shortfalls in funding.

Gaining bases

Gaining bases must address many of the same issues faced by losing bases. Fortunately, a planning system and support structure already exists for the gaining bases. The similarities between BRAC planning for losing and gaining bases include:

- Bases that dedicate full-time resources to BRAC have more comprehensive plans.
- The additional workload falls on key in-house personnel, and the deadlines are short.
- Local communities look to the base for information about the BRAC impacts.
- A well-written plan clarifies and informs about how the base could expand without foreclosing its options for future growth.
- Productivity improvements in preparing MILCON project documentation benefits all bases.
- BRAC planning reports support the budget request.
- The interrelated data bases would also save time when planning and managing base expansion.

Conclusion

Force restructuring and realignment will be part of the military mission over the next decade. Even if future realignments are not as extensive as the 1993 San Francisco Area BRAC closures, managers can expect short response periods and a variety of other management challenges.

The quantity of information that must be developed for realignments makes it difficult to remain focused on budget, justifications, priorities and future efficiencies. PWCSFB found that organizing early helps manage the process, whether it involves new construction or drawdown and closure. ❑

The completed Naval Air Technical Training Center will occupy 200 acres on the site of a former naval aviation depot.

NATTC: Innovation is the key to success

By CDR Robert B. Raines, CEC, USN, P.E.
William G. Cooper, P.E.

The Naval Air Technical Training Center (NATTC), Memphis, Tenn., will be relocated to Naval Air Station Pensacola, Fla., as a result of the 1993 Base Realignment and Closure (BRAC) program. The move will require more than 2.5 million square feet of construction valued at $300 million. The relocation of NATTC will be the first part of an integrated chain of events that will also relocate the Bureau of Naval Personnel from Washington, D.C., to Memphis.

BRAC legislation requires closing activities to close within six years. To complete the entire chain of events, the Pensacola construction must be completed by late 1996. Business as usual would not accomplish this ambitious goal, so a unique acquisition program that combines proven methods with innovations was established to meet this challenge.

The relocated NATTC is being constructed on a 200 acre site formerly belonging to the naval aviation depot, which was closed as a result of BRAC '93. This site was the only major undeveloped area at NAS Pensacola. The site required a design that mitigated the environmental impacts of a heavy industrial area and a construction plan that allowed for continued operations during the first year of construction.

The Southern Division (SOUTHDIV) of the Naval Facilities Engineering Command, located in Charleston, S.C., used indefinite delivery requirements architect-engineer contracts with Greiner Inc. of Tampa, Fla., for the training center projects and LS3P Architects of Charleston,

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CDR Robert B. Raines was the BRAC coordinator and the resident officer in charge of construction for the Naval Air Technical Training Center project. William G. Cooper was the supervisory civil engineer for the project.

The NATTC construction site in early June 1995.

S.C., for the berthing, messing and morale, welfare and recreation facilities.

Working closely with the customer, a campus concept was developed in which all facilities would be within a 10 minute walk from each other. New construction was required for an 800,000 square foot consolidated training facility; 10 bachelor enlisted quarters (BEQs) totaling 1,000,000 square feet; a galley, medical-dental clinic; a fire fighting trainer; an enlisted club; and heating and cooling plants with 6,500 tons of capacity. Additionally, major renovations to 10 existing buildings and an upgrade of the existing waste water treatment plant were necessary. Complicating this enormous design effort was a 12-month design schedule necessary to allow 22 months for construction and two months for outfitting the completed facilities.

Partnering

A partnership was developed early in the acquisition phase. SOUTHDIV, Public Works Center Pensacola, the Office of the Chief of Naval Education and Training, the naval air station and the local community worked together to develop an acquisition plan. To minimize site coordination problems on the main campus, a single construction contract estimated at $220 million was proposed to attract nationally recognized contractors. Ten smaller contracts were developed for projects off the main campus site to satisfy local and small business interests. This plan was quickly solidified after it was proposed due to close coordination with the Chamber of Commerce, the local Association of Government Contractors and congressional staffs.

Development of design and construction plans was next on the agenda. On the design side, a series of reviews enabled each construction stakeholder to have input into the design decisions as they were made. Rather than relying on traditional design staff re-

views, a team of maintenance mechanics, instructors, facilities personnel, and the resident officer in charge of construction (ROICC) staff were given key roles in the review process. An integrated data base was developed by PWC Pensacola for all design review comments to be tracked and implemented. This program led to the successful incorporation of more than 5,000 design and constructability items into the completed design while staying on the original design schedule.

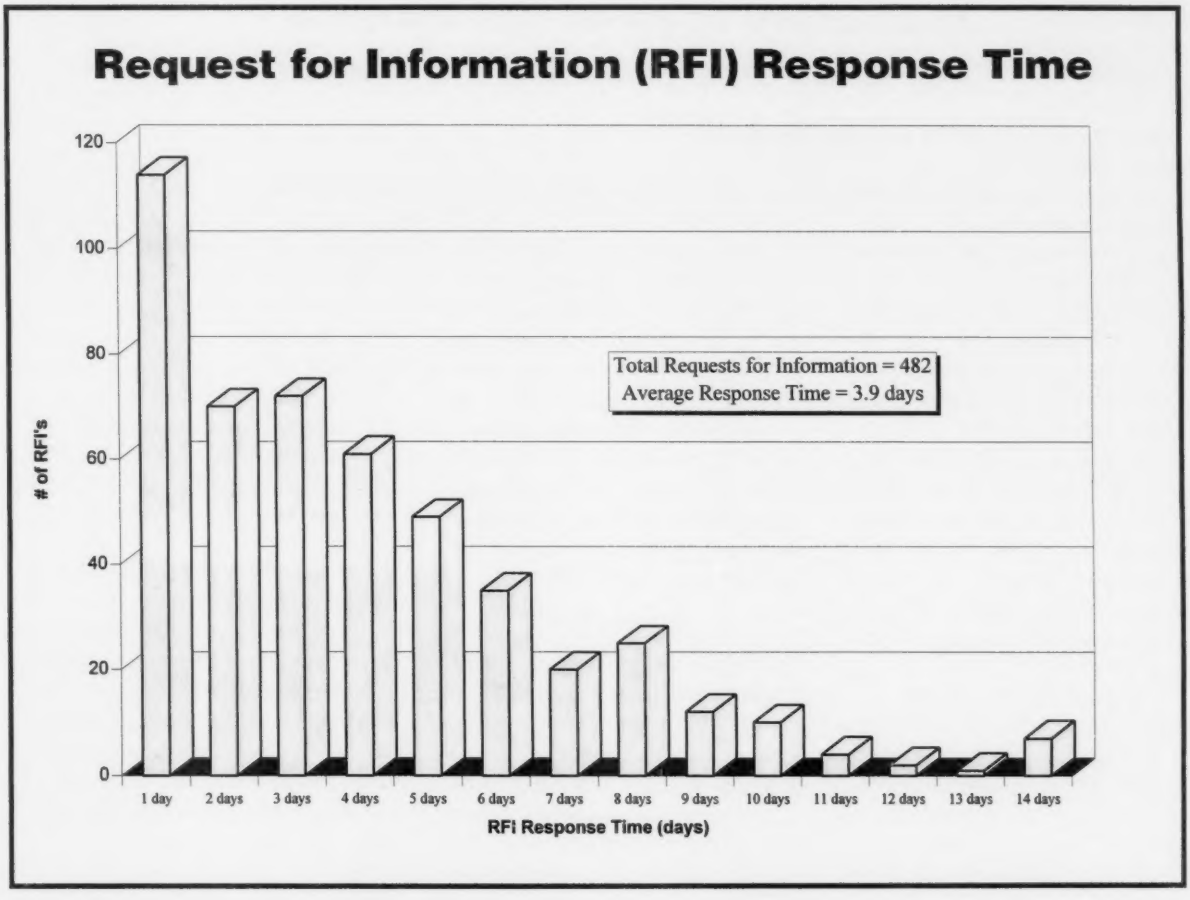
Selection of an experienced construction firm with a proven track record was necessary to meet the demands of a construction program expected to peak at more than $1 million per day in work in place (WIP). Using open competition, four firms were prequalified to participate in constructability reviews at the three design review conferences and provide comments along with the Navy and design teams.

This process allowed the Navy to bring industry standards into the design process, generated hundreds of cost and time saving ideas, and started building trust, respect and a partnership between the Navy, designers and contractors. All this would be necessary to build the project on schedule once a construction contract was awarded.

Finally, best value source selection procedures were used to select a contractor from the four firms that participated in the constructability reviews. To make sure the successful offeror would be able to start construction immediately after contract award, a rigorous technical proposal requiring full environmental, health and safety plans; a complete cost loaded initial 90 day schedule; quality control plans; reference projects; and committed key subcontractors was used to determine the most technically qualified offeror. After review of the price and technical proposals, a $227 million contract with a $5 million award fee was awarded to the George Hyman Construction Company of Bethesda, Md.

Initial partnering session

Because of the schedule constraints, traditional ROICC/designer/contractor procedures would not be successful on a project of this size. Immediately after contract award, a



partnering session comprised of all stakeholders met for two days to develop mutual project goals and to commit themselves to making the project successful. The team established procedures for information management, identified the major obstacles that could be expected as the project progressed and drafted procedures to quickly and effectively resolve issues as they arose. Hyman and the ROICC also agreed to work together in developing the final cost loaded construction schedule to make sure this key management tool was produced and approved quickly.

During the design phase, the ROICC selected Primavera Expedition as the information management software for this construction program. Expedition can track all key construction information in a multi-user integrated real time data base that can be linked to the Primavera Scheduling software specified for this project. Using the standard reports provided with Expedition, the ROICC can manage requests for information (RFIs), submittals, correspondence, invoices and change orders with minimal effort. During the partnering workshop, Hyman agreed to use Expedition. Common identification systems were established, allowing management oversight of critical construction information requirements.

One of the most important aspects of contract execution was raising the level of expectation of project managers, designers and the construction contractor. An aggressive standard for RFI and submittal response times was agreed to at the partnering session. Priorities of one-, three- and five-day turnaround were established for RFIs, and 10-day submittal review periods were established. Commitment from all team members has made these processes an early success, with RFIs answered quickly and all submittals processed within 10 days.

On the construction end, Hyman brought one of their most experienced management teams to this project. By assigning a vice president to be in charge of field operations, Hyman clearly demonstrated their commitment to solving issues on-site, quickly and efficiently. Four days after contract award, Hyman was ready for the pre-construction conference, with a 25 person team taking over a local hotel to manage the project until their field office complex was ready. One week after award, initial demolition began and additional members of their management and construction team started relocating to Pensacola.

"The NATTC project shows that venturing outside business as usual is not only possible, but necessary to meet the increasing demands of today's dynamic environment."

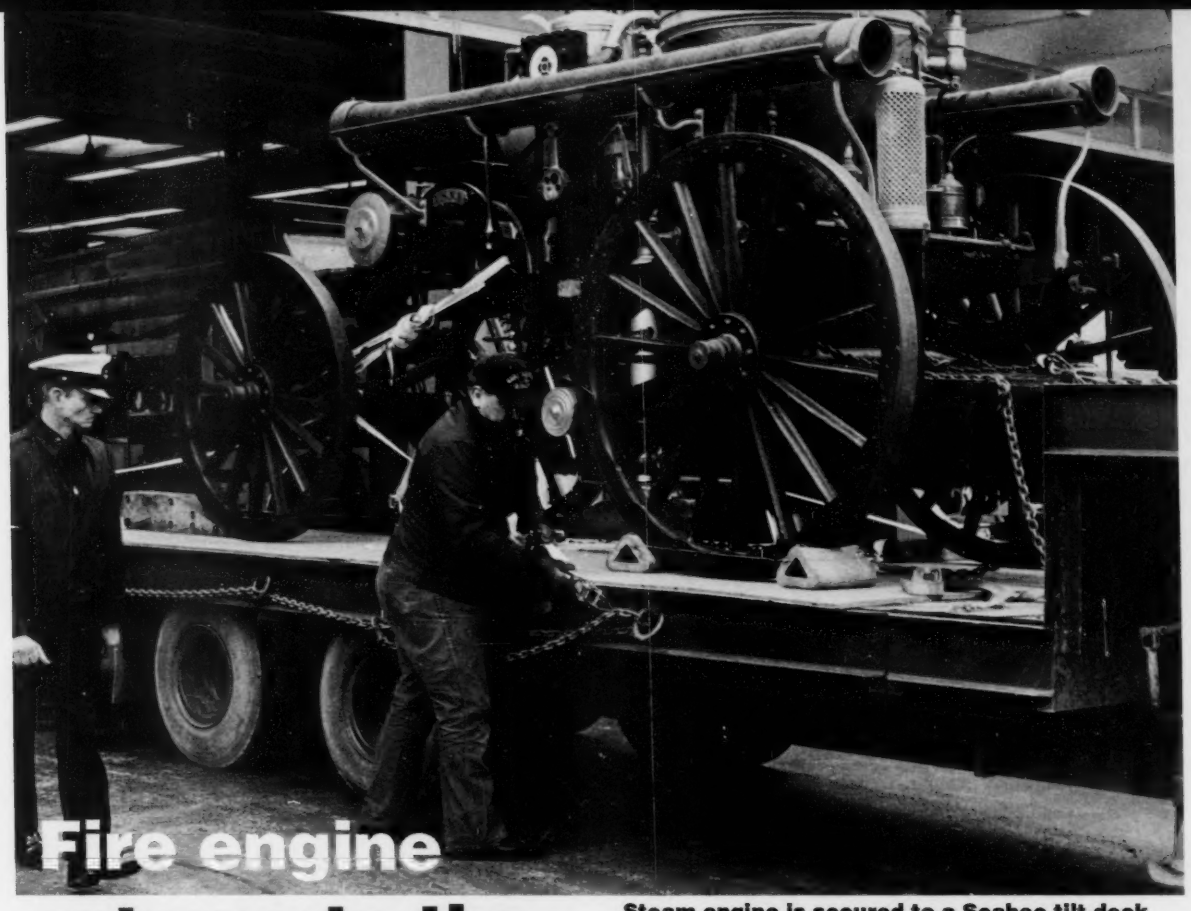
Innovations

Hyman's experience and the buying power of a project this large led to several innovations. Studying local weather data, Hyman determined the best time to place concrete was at 3 a.m., allowing it to set before the near daily afternoon thunderstorms could affect production. Requiring 13 million square feet of drywall, Hyman was able to have its supplier commit to manufacturing the sheetrock to fit the barracks rooms without field cutting. Just in time delivery schedules were developed to minimize handling time, requiring close coordination for delivering and staging material at night to be ready for crews each morning.

Multi-shift and weekend operations started immediately for the equipment-intensive site fill and demolition work. More than 100,000 square yards of asphalt and concrete pavement will be recycled for site fill and road bedding. In the 90 days since award, Hyman WIPed $20 million, fully 30 percent ahead of what was projected with their technical proposal. This work includes mobilizing 80,000 square feet of office space and an on-site batch plant and crusher, placing 20,000 cubic yards of concrete for 700 barracks columns, slab on grade and elevated slabs for the first two BEQs, and hauling in more than 100,000 cubic yards of fill.

As of mid-May 1995, more than 400 tradesmen and management staff were on site, with an expected peak of 1,500.

The NATTC project shows that venturing outside business as usual is not only possible, but necessary to meet the increasing demands of today's dynamic environment. To survive in the marketplace of the future, the Navy must continue to emphasize such tools as source selection, innovative management, award fees and partnering to meet our customer's needs. ❑



Fire engine returns to the Academy

Steam engine is secured to a Seabee tilt-deck trailer at the Winnetka, Ill., fire department. Seabees from Naval Mobile Construction Battalion (NMCB) 25 provided the trailer and the manual labor.

By William Killen
Charles Senerius

In March 1992, a piece of U.S. Naval Academy history came home. A fire engine built in 1899 was returned to the Academy, the fire engine's original place of service, from Winnetka, Ill.

The engine was donated to the Winnetka fire department in the mid-1970s after being discovered on a farm in Barrington, Ill. Fire fighters restored the engine and displayed it in the village's 1976 bicentennial parade, where it was drawn by horses and carried firefighters dressed in 1890's clothing. It was then stored in the Winnetka fire station and shown to youngsters during the department's annual open house.

"It was a great show piece," said Winnetka Fire Chief Ron Colpaert. "It was probably one of the largest [steam fire engines] of that era. We learned the Navy midshipmen, not horses, use to pull the engine."

The fire engine was called a "steamer" because its pump was driven by steam boiler power and its operator was required to be a qualified steam boiler engineer. Manufactured by the American Fire Engine Company, the steamer was one of the "first size," or largest steam fire engines built, and the equivalent of a 1,000 gallon capacity pumping engine of mid-20th century design. The engine weighs approximately 9,500 pounds and is 16.5 feet long by 7 feet wide by 10.6 feet high.

"We felt the steamer should be returned to the Naval Academy....I've been asked, why don't we sell it. Do you really sell American history?" Colpaert asked.

Colpaert contacted Fire Chief Dan Marshall, at the

William Killen is the director of the Navy fire and emergency services program at the Naval Facilities Engineering Command in Alexandria, Va. Charles Senerius is the traffic manager in the shore installation management division at NAVFAC.

Glenview (Ill.) Naval Air Station, who then made inquiries to Washington, D.C., and the Academy in Annapolis, Md. The Naval Facilities Engineering Command (NAVFAC), which manages the fire equipment program for the Navy, expressed interest in obtaining the antique, and the Winnetka Village Council has approved the donation.

The engine was moved from the Winnetka Fire Department to the Glenview Naval Air Station fire house on a Navy Seabee tilt-deck trailer. The Glenview Naval Air Station fire department was the temporary custodian for NAVFAC. The engine was displayed along with more modern fire engines during the naval air station's 1992 Fourth of July open house.

The steamer was brought home to Annapolis through the efforts of a specialized carrier, Naval Mobile Construction Battalion 25, Construction Battalion Unit 403, the Village of Winnetka, the Winnetka Fire Department, the Glenville Naval Air Station fire department, NAVFAC and the Naval Academy public works department.

"The fire engine is a rare piece," said Ken Hagan, director of the Naval Academy Museum, "but it's oversized and it's been difficult finding a good place to exhibit. We've had several locations in mind—Rickover Hall, the Visitors Center at Ricketts Hall and Dahlgren Hall—but nothing seems suitable just yet. Eventually we'll find a place, because the fire engine is not just an object, it's tied into the history of this place." ❑

Steam engine is transferred from a commercial van to a Seabee tilt-deck trailer at the U.S. Naval Academy in Annapolis. Seabees from Construction Battalion Unit 403 provided the manual labor.

Acquisition reform means new—and improved—ways of doing business

By William Timperley

Acquisition reform—initiatives to change the way the government contracts for requirements—is evolving, and many players are involved in acquisition reform. This article will look at the Navy's on-going initiatives and the changes which will come about due to the Federal Acquisition Streamlining Act (FASA).

Before the enactment of FASA, Nora Slatkin, the former Assistant Secretary of the Navy for Research Development and Acquisition and the Senior Acquisition Executive for the Navy, made acquisition reform her top priority. She initiated a program known as the "ABCs" of acquisition reform to improve the Navy's acquisition process.

The "ABCs" tapped into the commercial market to meet Navy needs. Since the Naval Facilities Engineering Command had already integrated with the commercial market, these initiatives had minimal effect on the manner in which NAVFAC conducted its day-to-day business.

However, the Federal Acquisition Streamlining Act, which was signed into law in October 1994, will have a significant impact on the way in which NAVFAC does its day-to-day contracting. (Except for a limited number of specified provisions, FASA does not become effective until implementing regulations in the form of new Federal Acquisition Regulation (FAR) provisions are published or October 1995, whichever occurs first. These regulations are currently being published for comment by the public.)

Major impacts of FASA

The act is composed of 10 titles, or sections, each addressing a different issue or issues. The major areas of impact on NAVFAC's way of doing business will be reviewed in this article.

Title IV deals with simplified acquisition (SAT) pro-

"The thrust is to make it simple to acquire small dollar items."

William Timperley is the director of the Contracts Policy Division at the Naval Facilities Engineering Command Headquarters in Alexandria, Va.

cedures. Purchases of more than $2,500 but less than $50,000 (or $100,000 if an agency has a certified Federal Acquisition Network (FACNET) system), may use these procedures. All actions taken under these procedures are reserved for small businesses unless the contracting officer cannot obtain offers from at least two small businesses.

The law simplifies the normal procedures in two ways. First, the law lists 13 statutes that are not applicable to these procurements. Second, it directs the FAR Council to review all currently required clauses to identify those that can be eliminated.

The statute, however, does not remove the statutory requirement to have the appropriate Davis Bacon and or Service Contract Act wage rate in all SAT procurements. In addition, the statute changes how bonding requirements are handled.

FASA makes procurements under the SAT exempt from Miller Act bond requirements. In place of the Miller Act bonds, the contracting officer must select from a list of payment securities listed in the FAR. The list, as set forth in the draft FAR regulation, includes irrevocable letters of credit, triparty accounts in a federally insured institution, negotiable certificates of deposit and the current items listed in FAR 28-204. Performance bonds for procurements under SAT procedures have been eliminated.

Procurements of less than $2,500, or micro-purchases, are also covered. These procurements are exempt from small business set aside and buy American requirements. The thrust is to make it simple to acquire small dollar items.

Section IX deals with the Federal Acquisition Network. The statute requires that all agencies have a FACNET (electronic commerce) system by Jan. 1, 2000. All systems must be approved by the senior procurement official for that agency. The implementation of FACNET will result in a major cultural change—no paper throughout the procurement process. These actions will be done electronically:

- Solicitations will be issued, contractors' questions and proposals will be received
- Contracts will be awarded
- Orders will be placed
- Notification will be made to proposers of the award
- Payment will be made and data will be archived

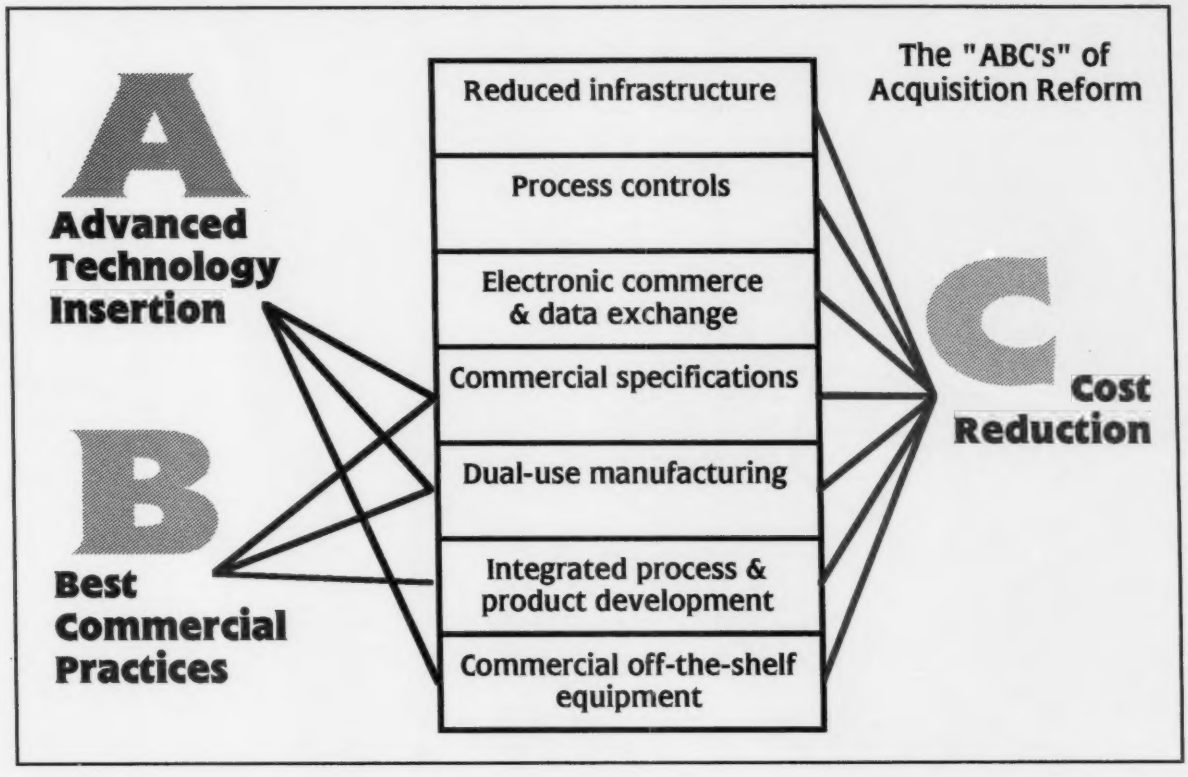
In addition to these gains in efficiency, gains will be made in advertisement time and in proposal response time. If a procurement is put out over an approved FACNET system for procurement up to $250,000, a synopsis in the Commerce Business Daily is not required. Specific response times are not specified. FASA requires that response times be specified in the FAR that reflect a "reasonable amount of time" for proposers to submit their proposals.

The implementation of FACNET should help to significantly reduce procurement time. However, before NAVFAC can take full advantage of this capacity, several issues unique to the construction world must be addressed. First is the issue of computer literacy among the small business contractors who do the bulk of the command's less than $100,000 procurements. Second is the issue of being able to transmit drawings. This encompasses how long (and therefore how much it will cost the proposer in computer and line time charges) it takes to transmit drawings. In addition, the problem of packaging drawing requirements so they are meaningful to a small contractor must be resolved. NAVFAC is working to resolve these issues.

Section VII deals with expanding the use of commercial items in meeting government requirements. FASA

10 Titles
of the
Federal Acquisition Streamlining Act

I	Contract Formation
II	Contract Administration
III	Major Systems
IV	Simplified Acquisition Threshold
V	Acquisition Management
VI	Other Procurement Related Matters
VII	Small Business & Socioeconomic Laws
VIII	Commercial Items
IX	Federal Acquisition Computer Network
X	Implementation



requires that requirements be stated in terms of one of the following:

- Functions to be performed
- Performance required
- Essential physical characteristics

Additionally, the "requirements are to be defined so that commercial items may be procured." This is a giant cultural change in how the Department of Defense and the government as a whole does business. Commercial requirements and not government-unique military specifications and standards are now the norm. However, this will not be a major change in the way NAVFAC does business. Service contracts have been drafted in terms of performance work statements for some time. In addition, construction procurements are bought using either design-build, where only the required functions are specified, or using other standard commercial techniques and building components.

There are new procedures for handling task and delivery order contracts. FASA has a preference for the award of multiple contracts. In other words, unless you have a good reason as specified in FAR not to award multiple contracts, you should make multiple awards. In addition, FASA gives guidance on how to place orders under this arrangement.

The information to be disclosed in debriefings has been expanded. The proposers must now be told their relative ranking, the basis for award to the winning proposer and the answer to relevant questions concerning the selection process.

All inquiries concerning issues of contract administration from a small business must be responded to within 30 days. If a small business requests an alternative dispute resolution process and the government is not using ADR, the government must give a written explanation of why it is not using the ADR procedure.

•••

FASA gives us new tools such as SAT and FACNET, which will simplify and improve the way requirements are procured. We need to move quickly to overcome any obstacles to their implementation so we can take full advantage of the efficiencies offered by these procedures. ❑

Navy diver places air in lift bag to raise a cable off the ocean floor so repairs can be made to the cable.

Underwater construction: U.S. Navy Seabee style

By LCDR David M. Balk, CEC, USN

Seabees of the Naval Construction Force (NCF) became involved—and famous—in construction diving during World War II when building advanced bases throughout the Pacific theater. Over the past 50 years, the Seabee divers have expanded their underwater construction capability and have carried out missions from the cold waters of the Arctic to the rivers of Vietnam. This article will give a brief overview of the accomplishments of the Seabee divers.

During World War II, most of the early Seabee diver projects were performed by specially trained diver-qualified Seabees assigned to the naval mobile construction battalions (NMCBs). The projects included underwater demolition of reef obstructions and in-shore construction necessary for the development of channels, harbors and mooring facilities for the fleet.

Several small, semi-independent units were formed to perform combat underwater demolition, limited salvage operations and underwater construction during this period. These units were the predecessors of the underwater demolition teams, which originally included diver-trained Seabees and were led by Navy Civil Engineer Corps officers.

UCT dets are established

Interest in ocean engineering and ocean facilities was renewed in the mid-1960s. In 1969, an underwater construction team (UCT) detachment (det) was established at Davisville, R.I. (It was later moved to Little Creek, Va.) A second UCT det was established at Port Hueneme, Calif., in 1971.

Installation and cable stabilization techniques learned during projects undertaken in the late 1960s set a standard for many UCT projects in the years to follow. In February 1969, a team of approximately 20 Seabee divers provided underwater construction support for the Tektite I undersea habitat launched in 52 feet of sea water (fsw) near St. John, U.S. Virgin Islands. The installation of the 160-ton Tektite I undersea habitat was accomplished without the use of a floating crane. Instead, the Seabees configured an "underwater elevator" lifting system assembled from locally available pontoon sections.

The second large scale project was the construction operations on the test array installation of the Azores Fixed Acoustic Range (AFAR). The project began in March 1970 at Andros, Bahamas, in 1,300 fsw. The AFAR project required underwater explosive demolition producing a trench through the precipitous basalt submarine island shelf, and installation of 1,500 feet of split pipe on each of the four large, double-armored power and signal cables. The Seabee divers devised an innovative procedure for application of the split pipe (which weighed 60 pounds per three-foot section) by underrunning the cable with a causeway section and applying the split pipe on deck. This method expedited by a factor of 15 the industry standard of applying the split pipe with cable in place on the ocean bottom.

Other projects accomplished included pier reconstruction at McMurdo Station, Antarctica, and cable installation and stabilization in Iceland.

LCDR Dave M. Balk the commanding officer of Underwater Construction Team Two, homeported at the Naval Construction Battalion Center Port Hueneme, Calif. *For their invaluable contributions, LCDR Balk would like to specifically thank: Captain Kevin Gross, CEC, USN; Lieutenant Marc Myrum, CEC, USN; and the men and women of the underwater construction teams, past and present.*

Navy diver places air in lift bag to raise a cable off the ocean floor so repairs can be made to the cable.

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Vietnam era

During the Vietnam war, Seabee divers' primary tasks included repair of damaged waterfront facilities and construction of new bridges, piers and POL (petroleum, oils and lubricants) facilities. Often the only diving personnel available, they also performed small boat salvage operations and security inspection swims on bridges, piers and underwater fuel lines.

Beginning in 1971, underwater construction divers assisted with the building of the naval installation at Diego Garcia. Seabee divers performed a variety of harbor maintenance and construction services including mooring and underwater connection of fuel and cement transfer lines ashore, inspection and repair of the underwater pipelines, recovery of equipment dropped overboard during supply ship cargo transfer operations, inspection and repair of all channel marker and fleet mooring buoys, and repair of the offshore sewage outfalls. Seabee divers at Diego Garcia also performed all subsurface maintenance on the desalination barge. This maintenance required blasting a new trench for barge mooring at the industrial "I" site.

UCTs established

Recognizing the need for a permanent capability for harbor, waterfront and ocean construction, the Chief of Naval Operations formally commissioned UCT One and UCT Two on Feb. 15, 1974. The early teams were composed of 12 to 15 Seabee divers with additional divers and support personnel assigned for temporary duty from the NMCBs as project needs required. With the growing workload and complexity of projects, the team manning grew to 34 personnel each.

A manpower initiative for 1983 increased the sea component by 68 percent to 41 enlisted, and increased the officer complement to three, upgrading the operations officer billet to the grade of warrant officer. In 1994,

Two divers surface after completing repairs to equipment on the ocean floor.

Diver places epoxy in a hole that will be used to secure a cable to the ocean floor.

12 additional enlisted billets and 38 reserve billets were added to each UCT, reflecting the growing and increased complexity of the UCT mission.

Diving statistics reflected the increasing workload during the early years. In 1979, the two small UCTs were performing 3 percent of all Navy working dives.

This trend continued to where in the mid-1980s, they were performing more than 60 percent of all Navy working dives, although the UCTs comprised less than 10 percent of all Navy divers.

UCTs today

Today, each UCT consists of 106 active duty and reserve personnel, 80 of whom are Seabee divers distributed among three active duty and two reserve air detachments. (The other personnel are support staff including Seabee mechanics and builders, yeomen and storekeepers.) Each active duty air detachment is similar in capability and composition.

UCT missions include tasks such as pier and cable inspections; repairs to piers, pilings, and cables; maintenance and construction of underwater discharge outfalls; and participating in naval amphibious exercises.

In short, if the task has to deal with facilities—and is anywhere on or seaward of the beach—the UCTs are probably involved. The UCTs can be found exercising their self-sustaining diving operations in the Arctic, Antarctic and all points in-between.

The air det deployment schedule is developed by stringing several jobs together. During a deployment, each of the three air dets goes to approximately six locations, resulting in a total of 18 different locations visited during each deployment cycle.

Throughout their history, the UCTs have proven to be highly mobile units, staffed by exceptionally professional construction divers and capable of executing highly complex ocean construction projects under the most adverse conditions. ❑

36525 DAYS

Lewie B. Combs

By JO1 Calvin F. Gatch Jr.

When Captain Jack C. Rickels, CEC, USN, visited Rear Admiral Lewis B. Combs, CEC, USN (Ret), several years ago at his Red Hook, N.Y., home, he noticed that the elderly admiral had an entire table full of pill bottles next to him.

"I asked him how many prescription medications he was taking," CAPT Rickels said in a recent telephone interview. "He told me, 'None. Those bottles are all vitamins.' He then proceeded to describe each of the 19 vitamins he was taking and ended by giving me a mail-order form so I could order my own."

The man who was the Assistant Chief of the Bureau of Yards and Docks during World War II, who had a vital role in the formation of the Seabees, and who subsequently headed the Civil Engineering Department at Rensselaer Polytechnic Institute (RPI) in Troy, N.Y., celebrated his 100th birthday earlier this year. His health is fragile. His hearing is failing. His eyesight is almost gone, yet his spirit remains indomitable.

LT Lewis B. Combs, CEC, USN

"Until the last couple of years, RADM Combs continued to challenge himself by accepting speaking engagements," CAPT Rickels said. "He told me he wanted to remain alert and these opportunities helped him do so. He memorized his speeches because his eyesight was so poor he couldn't see the lectern. He has always maintained a military posture and his gregariousness has not been diminished by old age."

RADM Combs' recall of names is legendary. CAPT Rickels says he first became aware of that quality while he was an ensign assigned to the Boston Naval Shipyard in 1953.

"There was a reception in Boston, and RADM Combs came up to me and said, 'Ensign Rickels, how are you enjoying your time in the Civil Engineer Corps?' I had graduated from RPI a year previously...and only met RADM Combs at graduation," CAPT Rickels said.

Rear Admiral Donald G. Iselin, CEC, USN (Ret), a former Commander, NAVFAC and Chief of Civil Engineers, says, "He remembers more names than anyone I've ever known. Even today when we get together, he asks by name about my wife and children."

After distinguished Navy and civilian careers, RADM Combs has kept busy in retirement volunteering for civic and military causes. Throughout his life he has challenged himself. More importantly, he has inspired others to challenge themselves.

JO1 Gatch is a journalist with the Reserve Naval Construction Force Support Command in Gulfport, Miss.

"RADM Combs has been a take-charge person who has been productive at every stage of his life," RADM Iselin said. "In the mid-1970s the Seabee Memorial Scholarship Association asked him to become the chairman emeritus of the organization. We envisioned his role being primarily ceremonial.

"But RADM Combs had other ideas. He started writing letters to World War II friends and contacts soliciting funds. One of the letters he wrote was to George Brown, retired president of the construction giant Brown and Root, Inc. In the letter RADM Combs suggested that Brown send a check for $7,000 to establish a scholarship in memory of their mutual friend Admiral Ben Moreell.

"Several weeks later, Brown wrote back, saying, 'I like the idea, Lewie, but I think there should also be a scholarship in memory of Rear Admiral John Perry, another former Chief of Civil Engineers [and Chief of the Bureau of Yards and Docks], and one for you too, Lewie.' He enclosed a check for $21,000."

RADM Combs, who was born in Manchester Center, Vt., on April 7, 1895, entered the Navy in 1917 after graduation from Rensselaer Polytechnic Institute in 1916. Following a six-week indoctrination course at the U.S. Naval Academy, he was named assistant civil engineer in charge of field construction at the Navy Yard in Washington, D.C. After a five-year tour in Haiti, he was assigned to the Navy Yard in New York, N.Y., for a short tour prior to assignment to the Navy Yard in Portsmouth, N.H.

In 1929, he reported as senior assistant to the public works officer and executive officer of the public works organization for the 11th Naval District and Naval Operating Base, San Diego, Calif. He remained there until January 1932 when he became the public works officer in the 9th Naval District at Naval Training Station, Great Lakes, Ill. Ordered to the Philippine Islands, he served from May 1935 to April 1937 as public works officer in the 16th Naval District and at the Navy Yard, Cavite.

Assigned in June 1937 to the Bureau of Yards and Docks, he was detailed as officer in charge of construction of the Naval Experimental Model Basin, Carderock, Md., until January 1938, when he became Assistant Chief of the Bureau of Yards and Docks, a position he held until the end of the war. He was awarded the Distinguished Service Medal in recognition of his service in that capacity.

In March 1946, he became director of the Atlantic Division, Bureau of Yards and Docks in New York. He remained there until his retirement Dec. 1, 1947.

Upon retirement from the Navy, RADM Combs accepted a job as head of the Civil Engineering Department at RPI, a position he held for almost 14 years. Besides the regular undergraduate and graduate programs, the Institute's special program for Naval Academy and Coast Guard academy graduates known as the "CEC Qualification Program" claimed an important share of his attention.

RADM Lewis B. Combs, CEC, USN

Graduates of the Navy and Coast Guard Academies went to RPI to receive either bachelor's or master's degrees in civil engineering. Throughout RADM Combs' tenure, several hundred military persons received degrees there.

Captain Ward W. de Groot, CEC, USN (Ret), was one of those individuals. A 1951 graduate of the Naval Academy, he studied at RPI in 1953 and 1954, receiving a bachelor's degree in civil engineering.

"RADM Combs was truly an inspirational person for me," CAPT de Groot said. "Over and above his interest in my academic advancement, RADM Combs had a strong presence in my development as a professional Navy Civil Engineer Corps officer. He made me feel that being a Civil Engineer Corps officer is a special calling. I left RPI with a wonderful feeling about the college and the Civil Engineer Corps."

RADM Combs lives in Red Hook with his wife of 70 years, the former Laura B. Warden of Rensselaer, N.Y. ❑

The ABCs of TQL

By LCDR Richard J. Dieffenbach, CEC, USN

This article takes a look at one officer's views on what Total Quality Leadership means to him and how it should be implemented.

Total Quality Leadership takes its place among the Navy's seemingly unlimited storehouse of acronyms. I have often suspected the existence of a special Chief of Naval Operations level office whose job is to create ever newer and more challenging acronyms. Once created, the new acronym is passed to a second office, whose job is to develop a program or initiative to fit the acronym.

All joshing aside, the purpose of this article is to EABCTQL. (Explain the **ABCs** of Total Quality Leadership.) My goal is to help you answer the acronym acid test question as applied to TQL: "What does [insert acronym here] mean to me?"

Total Quality Leadership is a management philosophy and set of tools rolled into one. TQL can be visualized as a triangle. Each corner of the triangle represents a key part of TQL, and all key parts are interconnected. Think of these as the ABCs of TQL:

A. Harness the intellectual capacity of everybody in the organization. This means every worker gets involved in making things work better. Such worker involvement is not possible by edict or decree, but must be drawn out by management skilled in the art of leadership.

B. Focus on the customer. In TQL, people become acutely aware of who their customers are. Why? Because customers are the everyday focus of the organization. Even within the organization, each person begins to view the next work station as their customer. The natural question becomes, "How can I better satisfy my customer's needs?"

C. Doing it with data. TQL uses data to answer these questions: How well is the organization doing in satisfying customer's needs? How much waste are we producing? (Waste can be in the form of standing in lines to receive service!) How far do we stray from schedule? How much time must the customer expend as a result of our product? How close to the target are we?

Other considerations

All three tools—A, B and C— are important to reach the goal of TQL: continuous improvement in product or service with less and less waste.

So, now the acronym acid test. What does [TQL] mean to you? Here's what it means to me.

A. Harness the intellectual capacity of everybody in the organization. TQL means those above me consider my ideas important and worth listening to. They create a working environment that encourages both structured and entrepreneurial improvement of product and process. They reward effort, and seek to share the "honey of the hive" with everyone who contributed. They do not fear or discount ideas from the workforce, but view them as tremendous improvement opportunities for the organization.

B. Focus on the customer. TQL means that people who work for me are my customers. They have needs only I can satisfy. My products are the tools, materials, equipment, training, resources and environment needed by them so that they can do their jobs. Also, TQL means that the organizations my office serves are customers, whose needs I have been empowered by my superiors to satisfy.

C. Doing it with data. TQL means using statistical data to know: how well is our process working? Are we hitting ever closer and closer to the bullseye?

Even more important, TQL statistical thinking exposes many traditional management beliefs and methods as worthless or even counterproductive. Here are a few that should be discarded on the junk heap of management history: the present performance appraisal system, man-

Continued on page 28

By LCDR Richard J. Dieffenbach is the assistant public works officer at Naval Air Station Brunswick, Maine.

Book Review

Breaching Fortress Europe examines the roles of engineers at Normandy

By Captain James H. Herzog, USN (Ret)

Breaching Fortress Europe: The Story of U.S. Engineers in Normandy on D-Day, by Sid Berger, 1994, 286 pages, illustrations, Kendall/Hunt Publishing.

Despite the volume of work already written about D-Day, Sid Berger's *Breaching Fortress Europe* nicely fills a niche for the modern student of World War II or the casual history buff. His stage-setting opening chapters covering the evolution of amphibious warfare pioneered by the U.S. Marine Corps, the U.S.-British political and military wartime conferences and subsequent planning are succinct and clear. The descriptions and pictures of Rommel's defensive structures and mines, though technical, are easily understandable.

The initial role assigned the Army and Navy engineer units to clear safe lanes through Rommel's formidable lines of defense was, in hindsight, unrealistic. The tradeoffs between surprise and potential destruction of more defenses were to the detriment of the engineers. The islands in the Pacific theater were bombarded for days before the engineers hit the beaches. However, on D-Day only 30 minutes were allocated to bombardments from the 14-inch guns of *Texas* and *Arkansas* and the lesser guns of allied cruisers and destroyers. The saturation bombing of the Normandy beaches by the Eighth Air Force just 30 minutes before H-Hour missed the beaches completely. The result of favoring surprise was very little damage to the obstacles confronting the engineers in the first wave.

The narrative of the first six hours of units losing their officers, experienced noncommissioned officers, and tanks and of the engineers losing their explosives and contact with their assigned infantry battalions reads like a cliff-hanger. Fortunately, charismatic leaders such as Brigadier General Norman Cota brought order out of the chaos, and naval gunfire closed in to take on shore batteries and targets of opportunity.

Much has been written about D-Day, and there are no surprises in this book. One unique plus, however, is the inclusion of copies of four declassified maps of the Omaha and Utah beaches. The book is a fitting tribute to the heroic sacrifices of engineers. The engineers took heavy losses to get ashore, clear safe lanes and stay there on D-Day. The proceeds of this book will be used to repair and maintain the five engineer monuments on Omaha and Utah beaches. Well done engineers—past and present! ❑

CAPT Herzog is a recognized authority on D-Day and the Normandy campaign. He is the originator of most of the World War II seminars taught at the University of Maryland.

Attention all engineering students!

You can secure your future in the Civil Engineer Corps, where qualified engineering students may earn more than $1,200 per month. If you are interested in qualifying for the Civil Engineer Corps, contact one of these officers for more information:

LCDR William E. Kenealy, CEC, USN
BUPERS, PERS 4413D
Washington, DC 20370-4413
(703) 614-3635/6

LT Jeff M. Johnston, CEC, USN
SOUTHWESTDIV, Code 09X
1220 Pacific Highway
San Diego, CA 92132-5100
(619) 532-3859

LT Paul F. Webb, CEC, USN
EFA Chesapeake, Code 09PR
Washington Navy Yard
Washington, DC 20374-2121
(202) 433-7285

OR CALL:
1 (800) 327-NAVY

38 Complete Basic Training at CECOS

Thirty-eight members of basic class number 205 have graduated from the Naval School, Civil Engineer Corps Officers, Port Hueneme, Calif. Course work is comprised of eight weeks of specialized training pertinent to the Navy's needs for shore installation engineering, public works management, construction contracting and administration, and Seabee operations.

ENS Scott A. Anderson*
to PWC Norfolk, Va.

ENS Christopher E. Archer
BS Aero. Eng./Univ. of Colo.
to NORTHDIV Cont. Off.,
Portsmouth, N.H.

ENS Keith R. Barkey
BSEE/ Univ. of Colorado
to EFA WEST Cont. Off.,
NAS Fallon, Nev.

LT Theron C. Colbert
BSEE / Univ. of Florida
to NAVAIRWPNSTA,
Point Mugu, Calif.

ENS James D. Collier
BS Sys. Eng. / USNA
to LANTDIV Cont. Off.,
Portsmouth, Va.

CWO2 Mitchel R. DeLong*
to NAVSPECWARGRU Two,
Virginia Beach, Va.

LT Allan H. Fehr III‡
BSCE / Virginia Tech,
to OICC Far East,
Yokosuka, Japan

LT Damon S. Feiner*
BS Sys. Eng. / USNA
to EFA CHES Cont. Off.,
Patuxent River, Md.

ENS David G. Gibbons
BSEE / UCSB
to SOUTHWESTDIV Cont. Off.,
Ocean, Calif.

ENS Brian M. Gilligan
BSME / RPI
to NAVSUPPACT,
Souda Bay, Greece

ENS Jesse L. Gobell
BS Str. Eng. / U.C. San Diego
to NAVCOMTELSTA,
Keflavik, Iceland

LT Cheryl M. Haneen*
BSME/Memphis State Univ.
to LANTDIV Cont. Off.,
Jacksonville, N.C.

ENS Michael L. Hipp
BSCE / Univ. of S. Carolina
to NORTHDIV Cont. Off.,
New London, Conn.

ENS Russell B. Hiser
BSME / RPI
to OICC MIDPAC,
Pearl Harbor, Hawaii

ENS Ingrid E. Hoden
BSCE / Univ. of Florida
to SOUTHDIV Cont. Off.,
Dallas, Texas

LTJG David R. Hopkins*
BSOE / USNA
to CBC Gulfport, Miss.

ENS Thomas M. Hunt
BSIE / Univ. of Texas
to NMCB Five,
Port Hueneme, Calif.

ENS Aaron E. Kottas
BSME / Univ. of Idaho
to SOUTHWESTDIV,
San Diego, Calif.

LT Ronald F. Krampe
BSOE / USNA
to PW, NAS Pensacola, Fla.

LT Jonathan W. LaBarre©.
BS Arch. / USNA
to PW, NAVAIRWPNCEN,
Point Mugu, Calif.

ENS Edward B. Lebby
BSEE / Univ. of S. Carolina
to NETC,
Newport, R.I.

ENS David G. Li*
to PWC Pearl Harbor,
Hawaii

ENS Jay D. Lutz
BSCE / Univ. of Washington
to OICC Far East Cont. Off.,
Okinawa, Japan

ENS Mae-Theresa E.
Mangohig
BSSE / U.C. San Diego
to EFA NW Cont. Off.,
Adak, Alaska

Reserve Officers

These reserve officers were part of basic class 205 during the period Jan. 30, 1995 through Feb. 15, 1995.

ENS Robert D. McClellan
BSCE / Univ. of N. Carolina
to NAF Adak, Alaska

LTJG Sean J. McKillop
BSME / Univ. of Rochester
to NAVHOSP Rota, Spain

ENS Tim H. Min
BSCE / Univ. of Nevada
to SOUTHDIV Cont. Off.,
Key West, Fla.

ENS William R. Mock
BSCE / Drexel Univ.
to NAVMEDCEN,
Portsmouth, Va.

ENS Matthew C. Motsko
BS / Univ. of Florida
to NMCB One,
Gulfport, Miss.

ENS Patrick J. Murray
BSCE / George Wash. Univ.
to MCAS,
Yuma, Ariz.

ENS Stephen Boppie
BSEE / Ohio Univ.
to NMCB 23,
NAVMCRESCEN,
Akron, Ohio

ENS Daniel R. Haubner
BSCE / Univ. of S. Alabama
to CBC (Aug.) Det. A,
N&MCRC, Mobile, Ala.

ENS Eric S. Kessel
BSME / Cornell Univ.
to NMCB 14,
Jacksonville, Fla.

ENS Gary A. Phillips
BSCE / Georgia Tech
to SOUTHDIV Cont. Off.,
Albany, Ga.

ENS William J. Pierce
BSCE / Univ. of N. Carolina
to LANTDIV Cont. Off.,
Jacksonville, N.C.

LT Armand T. Quattlebaum
BSEE / Memphis State Univ.
to LANTDIV Cont. Off.,
Virginia Beach, Va.

ENS William H. Klepac
BSCE / Auburn Univ.
to NMCB 74,
Redstone Arsenal, Ala.

ENS Mark A. Konz
BSEE / Fla. State Univ.
to NMCB 14,
Tallahassee, Fla.

ENS Scott J. Lumeden
MA Arch. / Univ. of Nebraska
to NAVRESREDCEN,
Great Lakes, Ill.

ENS Matthew J. Smith
BSCE / Univ. of Idaho
to NMCB 40,
Port Hueneme, Calif.

ENS Ryan M. Tibbetts
BSAE / Univ. of Colorado
to NAVHOSP,
Camp Pendleton, Calif.

ENS Kristofer M. Vogt
BSME / Univ. of Arizona
to SOUTHWESTDIV Cont. Off.,
Long Beach, Calif.

CWO2 Ray A. Pawley
BSCE / Utah State Univ.
to NMCB 26,
Peoria, Ill.

ENS Peter F. Pitman
BS Arch. / Boston ATC
to NMCB 27,
Brunswick, Maine

ENS Jaime A. Rioss
B. Arch. / Catholic Univ.
(Colombia)
to NMCB 21, Lakehurst, N.J.

ENS Mark R. Weller
BSCE / Penn State Univ.
to MCAS, El Toro,
Santa Ana, Calif.

ENS Philip B. Windust
BS Oc. Eng. / USNA
to SOUTHWESTDIV Cont. Off.,
Long Beach, Calif.

* With Distinction
‡ Class Commander
Ⓓ First in Class

ENS John W. Rouse
BSCE / N.C. State Univ.
to NCFSU,
Fort Jackson, S.C.

ENS James A. Treadway
BSE / UCLA
to NCFSU Two,
Port Hueneme, Calif.

NEWS WORTH REVIEWING

RADM Nash selected to relieve RADM Buffington as Commander, NAVFAC

Rear Admiral David J. Nash, CEC, USN, has been selected to relieve Rear Admiral Jack E. Buffington, CEC, USN, as Commander of the Naval Facilities Engineering Command and Chief of Civil Engineers. RADM Buffington will retire.

RADM Nash is Commander of the Pacific Division, Naval Facilities Engineering Command and Third Naval Construction Brigade in Pearl Harbor, Hawaii. Before his current assignment, he served three years in dual roles of commanding officer, Naval Construction Battalion Center, and commander, 31st Naval Construction Regiment, both located in Port Hueneme, Calif.

RADM Nash was commissioned in the Civil Engineer Corps in 1966 after graduation from the Indiana Institute of Technology in Fort Wayne, Ind.

The change of command ceremony will be held on Sept. 15 in the Washington Navy Yard, Washington, D.C.

RADM Jelley dies

Rear Admiral Joseph F. Jelley, CEC, USN (Ret) died on May 6 in Colorado Springs, Colo. RADM Jelley, age 91, had served as the Chief of the Bureau of Yards and Docks and Chief of Civil Engineers from 1949 to 1953.

RADM Jelley had also served as Deputy Chief of BUDOCKS and Deputy Chief of Civil Engineers. As Chief of BUDOCKS, he was responsible for the Navy's large shore construction program during the Korean War. In 1953, he became the first Director of Construction in the Department of Defense, and in 1954 he moved to Pearl Harbor and assumed command of Seabee battalions in the Pacific.

After 30 years of service, RADM Jelley retired from the Navy in 1957 and settled in Colorado Springs. His wife, Elizabeth, died in 1983. He is survived by two sons and a daughter; seven grandchildren; and seven great-grandchildren.

Get Moy is NAVFAC's new chief engineer.

Chief engineer is named

Dr. Get Moy is the Naval Facilities Engineering Command's new chief engineer.

He was most recently Assistant Deputy Under Secretary of Defense for Pollution Prevention in the Office of the Deputy Under Secretary of Defense for Environmental Security.

Associated with Department of Defense military construction and installation management programs since 1973, Moy served at NAVFAC headquarters from 1974 to 1979 and again from 1984 to 1989.

He holds a master's degree and a doctorate in engineering administration from The George Washington University, Washington, D.C., and a bachelor's degree in civil engineering from The Catholic University of America, Washington, D.C. He is also a graduate of the Naval War College, Newport, R.I., and a licensed professional engineer in Virginia.

Moy replaces John J. Cecilio, who retired in February.

SAME honors two CEC officers and Seabee

Congratulations to Commander Michael E. Schaefer, CEC, USN; Lieutenant William M. Sheedy, CEC, USN; and Steelworker First Class (SCW) Richard P. Glover, USN. They all are recipients of awards from The Society of American Military Engineers.

• **CDR Schaefer** received the Ben Moreell Medal, which recognized the most outstanding contribution to military engineering. He served as the resident officer in charge of construction for Joint Task Force Haiti, Operation Uphold Democracy. He quickly provided the urgent real estate actions required by international law in a semi-permissive military occupation.

• **LT Sheedy** received the Leif J. Sverdrup Medal for his superior leadership and technical expertise while serving as the Atlantic projects officer for the Second Naval Construction Brigade and the engineering coordinator and special advisor for the United Nations High Commissioner for Refugees in the former Yugoslavia. The medal is given to active duty military members of SAME who have made an outstanding engineering contribution.

• **Petty Officer Glover** of Naval Mobile Construction Battalion Five is the winner of the 1994 Marvin Shields Award, which is presented annually by SAME to the most outstanding Seabee. His assignments included air detachment platoon leading petty officer, disaster recovery operations crew leader and the deployment for training Korea operations chief.

PWC San Diego & SOUTHWESTDIV win SECDEF awards

Congratulations to Public Works Center San Diego and the Southwest Division, Naval Facilities Engineering Command.

Four employees of these organizations are winners of the 1995 Secretary of Defense Productivity Excellence Awards. Through their efforts, a savings of $2.1 million per year was achieved in providing electricity to Naval Air Station North Island and the Point Loma Naval Complex. Also, the reliability of service has improved.

Linda Wright (second from right) is shown accepting the NISH award. Wright is the associate director of small and disadvantaged business utilization at the Naval Facilities Engineering Command. Also show are (from the left) actor Elliott Gould, who helped with the presentation; Beverly Milkman, executive director of the President's Committee for Purchase from People Who Are Blind or Severely Disabled; and Ira L. Kemp, committee chairperson.

NAVFAC wins NISH award

The Naval Facilities Engineering Command is the winner of the 1994 Government Award presented by the National Industries for the Severely Handicapped.

NAVFAC was honored for its efforts to provide employment opportunities for persons with severe disabilities. In 1994, NAVFAC awarded 15 new contracts that generated jobs for more than 40 NISH participants.

DOD value engineering award presented to LANTDIV engineer

The 1995 Department of Defense Value Engineering Achievement Award was presented to William A. Bogue Jr., as the Outstanding Navy Value Engineering Professional. Bogue is a value engineer for the Atlantic Division, Naval Facilities Engineering Command in Norfolk, Va.

He was responsible for many success stories, which resulted in $16.5 million in acquisition cost savings during FY 94. He was the engineer in charge of technical development, review, acceptance and training of the Value Engineering Data Information System. It is a computer-based system that provides ready reference of historical value engineering construction data for application on future projects.

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TQL...

Continued from page 22

agement by micromanagement, management by status and management by objectives. These myths and counterproductive methods vaporize rapidly once you learn the basics of statistical thinking under TQL.

I hope my attempt to EABCTQL (do you remember the meaning of that acronym?) achieved its goal. A broad brush understanding of TQL is as simple as remembering the ABCs. Implementing TQL is something much more difficult, because that involves a basic thought process change for management. That will take years.

Learn more about TQL. Note that skills learned in TQL are directly transferable to the civilian sector. Look at any of the major corporations using TQL. They're learning their ABCs! ❑

Have you considered the reserves?

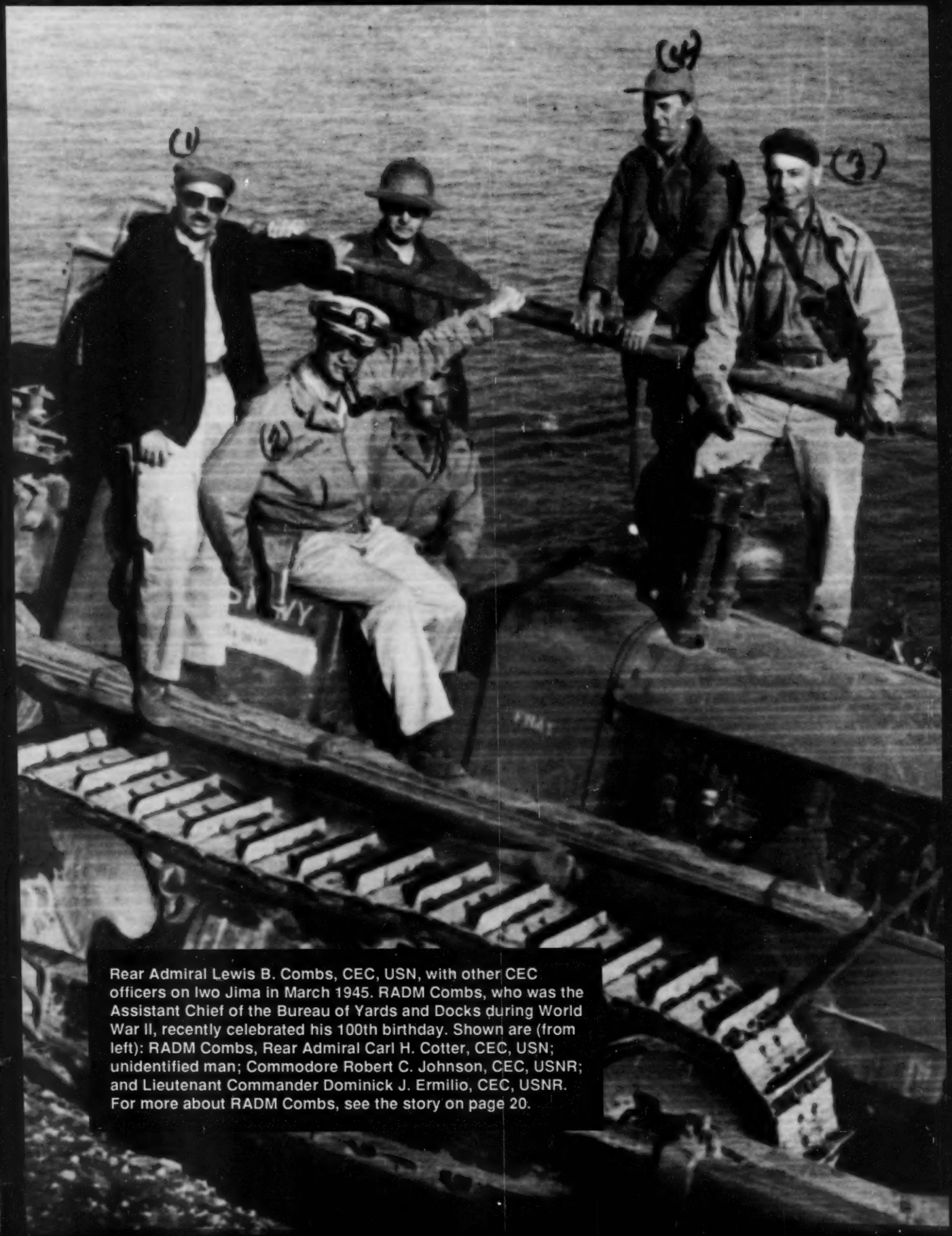
If you are a young construction professional in civilian practice or civil service, or are a graduating engineering or architecture college senior who has already selected a career path, the reserve Civil Engineer Corps may have a place for you. Qualified young professionals have the chance to achieve tremendous personal and professional satisfaction through:

- Direct appointment as an ensign, Civil Engineer Corps, U.S. Naval Reserve
- Challenging assignments within the reserve Naval Construction Force units in your geographic locale, in areas paralleling active duty in the Seabees or in facilities management
- Development of leadership and technical skills that will carry over directly into your civilian profession

Here's what you can do...
If you are a young engineer or architect, please call or write the reserve representative listed below.

Commander Alan Terpolilli, CEC, USN
Commander, Naval Surface Reserve Force (Code N53)
4400 Dauphine St.
New Orleans, La. 70146
Phone: (504) 948-5798 • DSN: 363-5798

An active duty accessions officer listed on page 23 may also be contacted for information.



Rear Admiral Lewis B. Combs, CEC, USN, with other CEC officers on Iwo Jima in March 1945. RADM Combs, who was the Assistant Chief of the Bureau of Yards and Docks during World War II, recently celebrated his 100th birthday. Shown are (from left): RADM Combs, Rear Admiral Carl H. Cotter, CEC, USN; unidentified man; Commodore Robert C. Johnson, CEC, USNR; and Lieutenant Commander Dominick J. Ermilio, CEC, USNR. For more about RADM Combs, see the story on page 20.

DEPARTMENT OF THE NAVY

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